

### **REMARKS**

Claims 1, 3, 4, 6-8, 15, 16, 18, and 20 are pending in the application upon entry of the amendments. Claim 1 has been amended to better disclaim the cited art. Claims 5, 9-14, 17, and 19 have been canceled without prejudice to delete improper dependencies. Favorable reconsideration in light of the amendments and the remarks which follow is respectfully requested.

Since the Advisory Action indicates that amendments described in the Reply to Final Office Action will be entered for purposes of Appeal, and an Appeal is not being pursued, this RCE Submission is written with the understanding that the amendments described in the Reply to Final Office Action have not been entered. Entry of the amendments described in the Reply to Final Office Action is sought in this paper.

### **Claim Objection**

Claims 9, 10, 13, 14, 17, and 19 have been objected to under 37 CFR § 1.75(c) for improper dependency. Claims 9, 10, 13, 14, 17, and 19 been canceled. Withdrawal of this objection is respectfully requested.

### **The Remaining Obviousness Rejection**

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) over Martin (US Patent No. 6,674,140) in view of Smith et al. (US Patent No. 6,395,651, hereinafter "Smith"). Martin relates to a process for forming durable anti-stiction surfaces on micromachined structures while still in wafer form with siloxane compounds. Smith relates to a process for forming producing a nanoporous silica film.

The Examiner contends that it would have been obvious to one skilled in the art to replace the wafer of the micromachined structure of Martin with a nanoporous silica film of Smith to arrive at the claimed invention. Applicants respectfully disagree for at least the following reasons.

Neither Martin nor Smith teaches or suggests modifying a porous silica film **using a cyclic siloxane having two or more Si-A bond units as reactive ends**. This is because both Martin and Smith fail to teach or suggest the specific cyclic siloxane recited in claim 1.

Martin describes various siloxane compounds including cyclic siloxanes. See Figure 3 of Martin, for example. However, when Martin describes its cyclic siloxanes among all siloxanes, Martin clearly teaches that cyclic siloxanes are stable. See Col. 11, line 56 of Martin. This teaching stands in stark contrast to the teaching at Col. 12, lines 7-10, where Martin indicates that linear siloxanes with reactive end groups provide superior anti-stiction characteristics. One skilled in the art would have readily deduced that the Martin fails to teach or suggest cyclic siloxanes with reactive end groups. This is not surprising as it was not known that contacting cyclic siloxanes with reactive end groups with a porous film provides a modified porous film advantageously exhibiting low relative permittivity and high elastic modules. Indeed, Martin fails to teach or suggest that contacting **cyclic siloxanes with two reactive end groups** with a porous film provides a modified porous film with low relative permittivity and high elastic modules. Martin merely describes stable cyclic siloxanes.

The claimed invention takes advantage of the fact that contacting cyclic siloxanes with two reactive end groups with a porous film provides a modified porous film with improved hydrophobicity and/or mechanical strength. Even if combined, Martin and Smith would have failed to motivate one skilled in the art to use the specific cyclic siloxane recited in claim 1 (cyclic siloxanes with two reactive end groups) to contact a porous film.

The claimed modified porous film possesses high elastic modules property and low relative permittivity that are the direct result of contacting cyclic siloxanes with two reactive end groups with a porous film. Since neither Martin nor Smith teaches or suggests using a cyclic siloxane having two or more Si-A bond units as reactive ends to modify a porous surface, the claims are non-obvious and therefore patentable over the cited art. Withdrawal of the rejection is consequently respectfully requested.

**Petition for Extension of Time**

A request for a one month extension of time is hereby made. Payment is being made through the EFS electronic filing system.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Respectfully submitted,  
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